

CLAIMS

What is claimed is:

- 5 1. A method comprising:
 - 2 programming a software development environment to reserve memory space
 - 3 for direct access by a remote direct memory process.

- 1 2. The method of claim 1 wherein the software development environment
2 comprises a managed runtime environment.

- 1 3. The method of claim 1 further comprising programming a garbage
2 collector in the software development environment.

- 1 4. The method of claim 1 wherein said programming a software
2 development environment comprises encoding a managed runtime environment to
3 recognize memory space that is accessible by a remote direct memory program.

- 1 5. The method of claim 1 wherein said remote direct memory process
2 comprises a network software memory program.

- 1 6. The method of claim 5 wherein said remote direct memory process
2 comprises an executable program that is enabled to operate by an operating system
3 comprising a kernel, the kernel reserving memory space to be accessed by the

4 operating system but being bypassed when the executable program of the remote
5 direct memory process accesses the memory space.

1 7. A method comprising: ✓
2 encoding a software module to reserve memory space that allows a network
3 software memory program to bypass a central processing unit to access the memory
4 space, the network software memory program operating according to a remote direct
5 memory access protocol.

1 8. The method of claim 7 wherein the software module comprises a
2 managed runtime environment.

1 9. The method of claim 7 wherein said encoding the software module
2 comprises programming a managed runtime environment to recognize memory
3 space that is accessible by a remote direct memory program

1 10. A computer-readable medium having stored thereon at least one
2 instruction that, when executed by a computer, causes the computer to perform:
3 encoding of a managed run time environment to reserve memory space for direct
4 access by a remote direct memory program.

1 11. The computer-readable medium of claim 10 wherein the managed
2 runtime environment reserves memory space for direct access by a network software
3 program.

1 12. The computer-readable medium of claim 10 wherein the computer-
2 readable medium comprises a storage medium comprising an instruction set
3 configured to provide communication between the managed runtime environment and
4 the remote direct memory program.

1 13. A system comprising:
2 a processor;
3 a memory coupled to the processor to support the processor operations;
4 a network interface controller interoperating with the processor and the
5 memory for network communications with at least another processor and
6 another network interface controller;
7 a network library accessible by the processor that provides remote direct
8 memory access capabilities;
9 a garbage collector to monitor memory usage by at least the processor; and
10 a storage medium encoded to create a software development environment to
11 reserve memory space for direct access by a remote direct memory program.

1 14. The system of claim 13 wherein the storage medium comprises a
2 software module encoded to reserve memory space for direct access by a network
3 software memory program.

1 15. An article comprising:
2 a storage medium comprising machine-readable instructions stored thereon to
3 encode a managed run time environment to reserve memory space for direct access
4 by a software development environment.

1 16 The article of claim 15, wherein the storage medium further comprises
2 machine-readable instructions stored thereon to: encode a garbage collector in the
3 software development environment.

1 17. The article of claim 16, wherein the software development environment
2 comprises a remote direct memory access environment.

1 18. The article of claim 15, wherein the storage medium comprises
2 machine-readable instructions stored thereon to encode a software module to reserve
3 memory space for direct access by the software development environment.

1 19. The article of claim 18, wherein the software development environment
2 comprises a remote direct memory access environment.